

**GEOLOGI DAN POLA SEBARAN SERTA KEMENERUSAN SEAM A1
DAN A2 FORMASI MUARA ENIM, KECAMATAN LAWANG KIDUL,
KABUPATEN MUARA ENIM, PROVINSI SUMATERA SELATAN**

SARI

Daerah penelitian secara administratif termasuk kedalam Kecamatan Lawang Kidul, Kabupaten Muara Enim, Provinsi Sumatera Selatan. Lokasi penelitian dapat ditempuh sekitar 4 jam dari Kota Palembang.

Penelitian ini bertujuan untuk mengetahui kondisi geologi daerah penelitian dan pola sebaran serta kemenerusan *seam* A1 dan A2. Metode yang digunakan dalam penelitian ini dilakukan dengan pengamatan kualitatif dan kuantitatif. Pengamatan kualitatif dilakukan dengan melakukan pemetaan geologi permukaan, pengambilan sampel dan data, serta analisis data. Sedangkan pengamatan kuantitatif yaitu dengan melakukan korelasi data bor dan penarikan kontur pola sebaran dan kemenerusan lapisan batubara.

Geomorfologi di daerah penelitian, berdasarkan aspek-aspek utama geomorfologi (morfologi, morfogenesis, dan morfoasosiasi), maka dapat dibagi menjadi empat satuan bentuklahan, yaitu lahan hasil penggalian tambang, lahan hasil timbunan tambang, danau tambang (*sump*), dan perbukitan lipatan menunjam.

Stratigrafi daerah penelitian termasuk dalam Formasi Muaraenim yang terdiri dari dua satuan batuan, dari tua ke muda: satuan batulempung Muaraenim, dan satuan batupasir-tufan Muaraenim.

Struktur geologi daerah penelitian terdiri dari antiklin menunjam dengan sumbu relatif barat-timur, sesar turun, dan *cleat* pada lapisan batubara dengan arah tegasan utama utara-selatan.

Sebaran lapisan batubara A1 dan A2 memiliki pola melengkung yang tidak teratur serta menyempit semakin kearah selatan dan tenggara disebabkan adanya sesar turun dibagian timur lokasi penelitian. Kemenerusan lapisan batubara A1 menerus melengkung mengikuti lengkungan tunjaman lipatan yang ada pada lokasi penelitian dengan orientasi sumbu lipatan relatif barat-timur dan menunjam ke arah barat. Kemenerusan lapisan batubara A1 dan A2 searah jurus perlapisan memiliki kemenerusan yang tidak teratur. Sedangkan kemenerusan searah kemiringan lapisan batubara juga terpotong oleh adanya sesar turun yang di interpretasikan berdasarkan data bor memotong lapisan batubara A1 dan A2. Lapisan batubara di lokasi penelitian termasuk kedalam bentuk lapisan batubara yang terlipatkan dan tersesarkan.

Kata kunci : batubara, Fm. Muaraenim, geologi, kemenerusan, pola sebaran

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ABSTRACT

The research area is administratively included in Lawang Kidul Sub-district, Muara Enim Regency, South Sumatra Province. The research location can be reached about 4 hours from Palembang City.

This study aims to determine the geological conditions of the study area and the distribution pattern and continuity of seam A1 and A2. The methods used in this research were qualitative and quantitative observations. Qualitative observations were made by conducting surface geological mapping, sampling and data, and data analysis. While quantitative observations are by correlating drill data and drawing contours of the distribution pattern and continuity of coal seams.

Geomorphology in the study area, based on the main aspects of geomorphology (morphology, morphogenesis, and morphoassociation), can be divided into four landform units, namely mine excavation land, mine dump land, mine lake (sump), and subdued fold hills.

The stratigraphy of the study area belongs to the Muaraenim Formation which consists of two rock units, from old to young: Muaraenim mudstone unit, and Muaraenim tuffaceous-sandstone unit.

The geological structure of the study area consists of a dipping anticline with a relative west-east axis, dipping faults, and cleats in the coal seam with a north-south main strike direction.

The distribution of A1 and A2 coal seams has an irregular curved pattern and narrows increasingly towards the south and southeast due to the presence of a normal fault in the eastern part of the study site. The continuity of the A1 coal seam is continuously curved following the bend of the existing folds at the study site with a relative west-east orientation of the fold axis and dipping to the west. The alignment of A1 and A2 coal seams in the direction of the strike of the seam has an irregular alignment. While the alignment in the direction of the coal seam slope is also cut by a normal fault that is interpreted based on drill data to cut the A1 and A2 coal seams. The coal seams at the research site are included in the form of folded and faulted coal seams.

Keywords: coal, Muaraenim formation, geology, continuity, distribution pattern